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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,837	11/14/2003	Vincent Bryan	31132.189	2562

46333 7590 12/10/2007  
HAYNES AND BOONE, LLP  
901 Main Street  
Suite 3100  
Dallas, TX 75202

EXAMINER
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STEWART, ALVIN J

ART UNIT	PAPER NUMBER
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3774

MAIL DATE	DELIVERY MODE
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12/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/713,837	BRYAN ET AL.	
	Examiner	Art Unit	
	Alvin J. Stewart	3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13, 18 and 30-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 13 and 33-37 is/are allowed.
- 6) ☒ Claim(s) 18, 30, 31 and 38-44 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Reissue Applications***

The reissue oath/declaration filed with this application is defective because it fails to contain the right language. In paragraph 19, where the applicant's representative "acknowledge the duty to disclose information which is material to the examination of this application" is incorrect and must be as following: "the duty to disclose information which is material to the patentability of this application" statement that all errors which are being corrected in the reissue application up to the time of filing of the oath/declaration arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414.

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1-9, 13, 18 and 30-44 are rejected as being based upon a defective reissue application under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

See MPEP § 1414.01.

***Allowable Subject Matter***

Claims 1-9, 13 and 33-37 are allowed.

Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Amendment*

Claims 10-12, 14-17 and 19-29 are canceled.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 18, 30, 38, 39 and 43 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Monson US Patent 4,863,477 in view of Bryan et al US Patent Pub. 2002/0035400 A1.

Monson discloses an intervertebral disc (2) comprising an exterior surfaces (4 & 6), a resilient body (30 & 42), an anchor (10, 13, 14) implanted in an anterior surface of a vertebral body, forming concave surfaces and inserting between the formed concave surfaces (see Figure 2, and col. 2, lines 55-58). However, Monson is silent on how the slightly concave walls of the patient's endplates are form. It is an inherent characteristic of the method of replacing artificial discs to use tools in order to remove the damage material in the disc. It is well known in the art to use knives, mill jigs, etc..to remove the damage tissue. Therefore, it well known in the art to use any type of tool in order to create a slightly concave shape in the walls of each endplate.

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Bryan et al disclose a convex shaped implant connected between vertebral bodies and the vertebral bodies are precisely prepared having a concave surface for the purpose of inserting the convex surface of the vertebral implant (see paragraph 57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the inherent step of making a concave shape of the Monson reference with the clear preparation step of making a concave shape opening of the Bryan et al reference in order to have a flush plate-to-plate connection of the implant with the vertebral bone and to provide a highly stable implanted joint.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monson US Patent 4,863,477.

Monson discloses the invention substantially as claimed. However, Monson does not disclose a milling jig.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to used a milling jig to make the holes between the vertebral bodies because Applicant has not disclosed that using that specific tool provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in

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the art, furthermore, would have expected Applicant's invention to perform equally well with any other tool because any tool will perform equally as well.

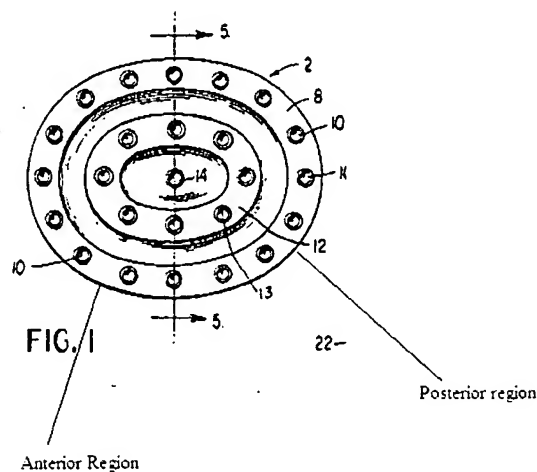
Therefore, it would have been an obvious matter of design choice to modify Monson reference to obtain the invention as specified in claims 31, 40-42 and 44.

### *Response to Arguments*

Applicant's arguments filed 09/18/07 have been fully considered but they are not persuasive.

The Examiner is adding the Bryan reference

Regarding claim 18, the Applicant's representative discloses that the Monson and/or the Bainville et al references do anticipate the claimed subject matter. For example, the Applicant's representative discloses that neither of the two references discloses at least one anchor in an anterior surface of at least one confronting vertebral bodies. The Examiner disagrees with the Applicant's point of view (see figure below disclosing how the Examiner interpreted the limitations).



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The examiner interpreted the left side of Figure 1 as the anterior region. Therefore, if the left side is the anterior region and a vertebral body is located above this figure after implantation, then the attachment elements (10) (located in the left side of the implant 2) are clearly anchor in an anterior surface of at least one confronting vertebral.

Regarding the arguments made to claims 30, 38, the Examiner added the Bryan et al reference in order to clearly disclose that the endplates have to be prepared to mate the convex walls of the implant and that it's an inherent characteristic to form concave surfaces in the endplates.

Regarding claims 41, 43 and 44, it would have been obvious to one having ordinary skill in the art to combine prior art elements according to known methods to yield predictable results. Additionally, it is well known to use known techniques to obtain predictable results.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J. Stewart whose telephone number is 571-272-4760. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*A. Stewart*  
**ALVIN J. STEWART**  
**PRIMARY EXAMINER**  
Art Unit 3774

December 6, 2007.